

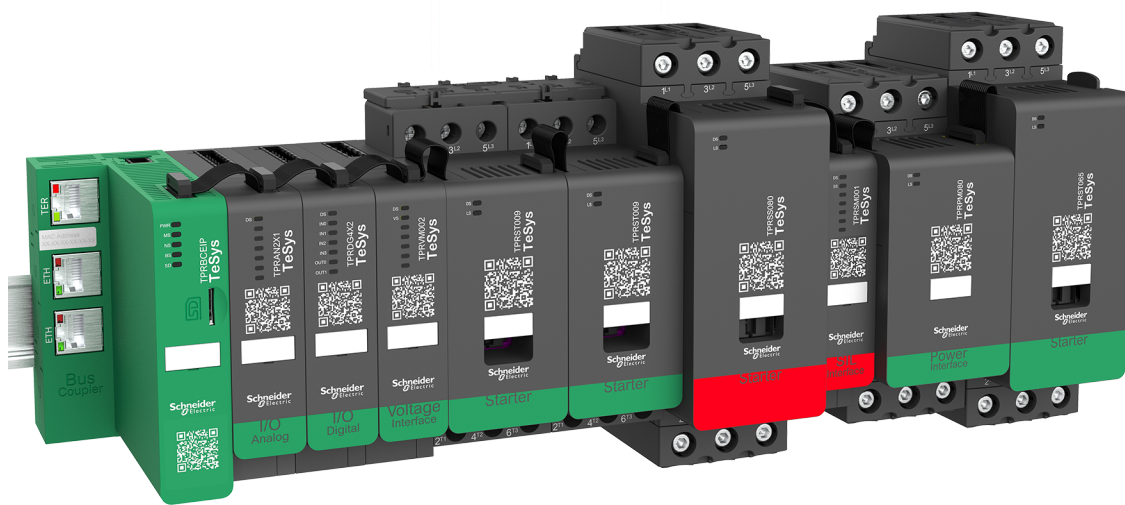
# TeSys Active

## TeSys island – Digital Motor Management Solution

### Quick Start Guide for EcoStruxure Control Expert Classic

TeSys offers innovative and connected solutions for motor starters.

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# Safety Information

## Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### **DANGER**

**DANGER** indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

### **WARNING**

**WARNING** indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

### **CAUTION**

**CAUTION** indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

### **NOTICE**

**NOTICE** is used to address practices not related to physical injury.

## Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

# About the Book

## Document Scope

This document provides the steps required in EcoStruxure™ Control Expert Classic software to create a project with a TeSys™ island and a logic/motion controller using the Modbus TCP protocol.

This document also provides the details about:

- Integrating the TeSys island into the EcoStruxure Control Expert Classic project.
- Accessing the TeSys island DTM (Device Type Manager) via EcoStruxure Control Expert Classic software for configuring the TeSys island modules and processes by using TeSys avatars.
- Using the function blocks of the TeSys island library that is available in EcoStruxure Control Expert Classic software for developing applications and to control TeSys avatar modules.

It is recommended that before using this document, the user must have knowledge on:

- Information on functionality, structure, and configuration of the TeSys island
- Information on functionality, structure, and configuration of the controller

## Validity Note

This guide is only valid for:

- EcoStruxure Control Expert Classic software v15.0 SP1 – Classic
- PLC Modicon M580

## Online Information

The information contained in this guide is likely to be updated at any time. Schneider Electric strongly recommends that you have the most recent and up-to-date version available on [www.se.com/ww/en/download/](http://www.se.com/ww/en/download/).

The technical characteristics of the devices described in the present document also appear online. To access the information online, go to the [Schneider Electric home page](#).

## Related Documents

Title of documentation	Reference number
TeSys island – System Guide	8536IB1901EN
TeSys island DTM Library Online Help	Available with the installer
Modicon M580 – Hardware Reference Manual	EIO0000001578
EcoStruxure Control Expert – TeSys island Library Control User Guide	EIO0000004519

## Terminology Derived from Standards

The technical terms, terminology, symbols and the corresponding descriptions in this manual, or that appear in or on the products themselves, are generally derived from the terms or definitions of international standards.

In the area of functional safety systems, drives and general automation, this may include, but is not limited to, terms such as safety, safety function, safe state, fault, fault reset, malfunction, failure, error, error message, dangerous, and so on.

The standards included are:

Standard	Description
IEC 61131-2:2007	Programmable controllers, part 2: Equipment requirements and tests.
ISO 13849-1:2015	Safety of machinery: Safety related parts of control systems. General principles for design.
EN 61496-1:2013	Safety of machinery: Electro-sensitive protective equipment. Part 1: General requirements and tests.
ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction
EN 60204-1:2006	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
ISO 14119:2013	Safety of machinery - Interlocking devices associated with guards - Principles for design and selection
ISO 13850:2015	Safety of machinery - Emergency stop - Principles for design
IEC 62061:2015	Safety of machinery - Functional safety of safety-related electrical, electronic, and electronic programmable control systems
IEC 61508-1:2010	Functional safety of electrical/electronic/programmable electronic safetyrelated systems: General requirements.
IEC 61508-2:2010	Functional safety of electrical/electronic/programmable electronic safetyrelated systems: Requirements for electrical/electronic/programmable electronic safety-related systems.
IEC 61508-3:2010	Functional safety of electrical/electronic/programmable electronic safetyrelated systems: Software requirements.
IEC 61784-3:2016	Industrial communication networks - Profiles - Part 3: Functional safety fieldbuses - General rules and profile definitions.
2006/42/EC	Machinery Directive
2014/30/EU	Electromagnetic Compatibility Directive
2014/35/EU	Low Voltage Directive

In addition, terms used in the present document may tangentially be used as they are derived from other standards such as:

Standard	Description
IEC 60034 series	Rotating electrical machines
IEC 61800 series	Adjustable speed electrical power drive systems
IEC 61158 series	Digital data communications for measurement and control – Fieldbus for use in industrial control systems

Finally, the term zone of operation may be used in conjunction with the description of specific hazards, and is defined as it is for a hazard zone or danger zone in the Machinery Directive (2006/42/EC) and ISO 12100:2010.

**NOTE:** The aforementioned standards may or may not apply to the specific products cited in the present documentation. For more information concerning the individual standards applicable to the products described herein, see the characteristics tables for those product references.

Product Related Information

⚠ WARNING

**LOSS OF CONTROL**

- The designer of any control scheme must consider the potential failure modes of control paths and, for certain critical control functions, provide a means to achieve a safe state during and after a path failure. Examples of critical control functions are emergency stop and overtravel stop, power outage and restart.
- Separate or redundant control paths must be provided for critical control functions.
- System control paths may include communication links. Consideration must be given to the implications of unanticipated transmission delays or failures of the link.
- Observe all accident prevention regulations and local safety guidelines.<sup>1</sup>
- Each implementation of this equipment must be individually and thoroughly tested for proper operation before being placed into service.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

⚠ WARNING

**UNINTENDED EQUIPMENT OPERATION**

- Only use software approved by Schneider Electric for use with this equipment.
- Update your application program every time you change the physical hardware configuration.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

1. For additional information, refer to NEMA ICS 1.1 (latest edition), "Safety Guidelines for the Application, Installation, and Maintenance of Solid State Control" and to NEMA ICS 7.1 (latest edition), "Safety Standards for Construction and Guide for Selection, Installation and Operation of Adjustable-Speed Drive Systems" or their equivalent governing your particular location.

## Before You Begin

Do not use this product on machinery lacking effective point-of-operation guarding. Lack of effective point-of-operation guarding on a machine can result in serious injury to the operator of that machine.

### **▲ WARNING**

#### **UNGUARDED EQUIPMENT**

- Do not use this software and related automation equipment on packaging equipment which does not have point-of-operation protection.
- Do not reach into machinery during operation.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

This automation equipment and related software is used to control a variety of industrial processes. The type or model of automation equipment suitable for each application will vary depending on factors such as the control function required, degree of protection required, production methods, unusual conditions, government regulations, etc. In some applications, more than one processor may be required, as when backup redundancy is needed.

Only the user can be aware of all the conditions and factors present during setup, operation and maintenance of the machine; therefore, only the user can determine the automation equipment and the related safeties and interlocks which can be properly used. When selecting automation and control equipment and related software for a particular application, the user should refer to the applicable local and national standards and regulations. The Accident Prevention Manual (nationally recognized in the United States of America) also provides much useful information.

In some applications, such as packaging machinery, additional operator protection such as point-of-operation guarding must be provided. This is necessary if the operator's hands and other parts of the body are free to enter the pinch point area and serious injury can occur. Software products cannot protect an operator from injury. For this reason the software cannot be substituted for or take the place of point-of-operation protection.

Ensure that appropriate safeties and interlocks related to point-of-operation protection have been installed and are operational before placing the equipment into service. All interlocks and safeties related to point-of-operation protection must be coordinated with the related automation equipment and software programming.

**NOTE:** Coordination of safeties and mechanical/electrical interlocks for point-of-operation protection is outside the scope of the Function Block Library, System User Guide, or other implementation referenced in this documentation.

## Start-Up and Test

Before using electrical control and automation equipment for regular operation after installation, the system should be given a start up test by qualified personnel to verify correct operation of the equipment. It is important that arrangements for such a check be made and that enough time is allowed to perform complete and satisfactory testing.

### WARNING

#### EQUIPMENT OPERATION HAZARD

- Verify that all installation and set up procedures have been completed.
- Before operational tests are performed, remove all blocks or other temporary holding means used for shipment from all component devices.
- Remove tools, meters and debris from equipment.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Follow all start up tests recommended in the equipment documentation. Store all equipment documentation for future references.

#### **Software testing must be done in both simulated and real environments.**

Verify that the completed system is free from all short circuits and grounds, except those grounds installed according to local regulations (according to the National Electrical Code in the U.S.A, for instance). If high-potential voltage testing is necessary, follow recommendations in equipment documentation to help prevent from accidental equipment damage.

Before energizing equipment:

- Remove tools, meters and debris from equipment.
- Close the equipment enclosure door.
- Remove ground from incoming power lines.
- Perform all start-up tests recommended by the manufacturer.

## Operation and Adjustments

The following precautions are from the NEMA Standards Publication ICS 7.1-1995 (English version prevails):

- Regardless of the care exercised in the design and manufacture of equipment or in the selection and ratings of components, there are hazards that can be encountered if such equipment is improperly operated.
- It is sometimes possible to misadjust the equipment and thus produce unsatisfactory or unsafe operation. Always use the manufacturer's instructions as a guide for functional adjustments. Personnel who have access to these adjustments should be familiar with the equipment manufacturer's instructions and the machinery used with the electrical equipment.
- Only those operational adjustments actually required by the operator should be accessible to the operator. Access to other controls should be restricted to help prevent unauthorized changes in operating characteristics.

# Introduction to TeSys island

## TeSys Master Range

TeSys is an innovative motor control and management solution from the global market leader. TeSys offers connected, efficient products and solutions for switching and protection of motors and electrical loads in compliance with all major global electrical standards.

## Overview

TeSys island delivers a connected and customized system for the direct control and management of low-voltage loads. The island optimizes availability of the physical modules with embedded pre-alarming management capabilities.

TeSys island targets performance and high-performance machines with automation architectures based on high-speed networks connecting devices to a PLC. Machinery operating at high production rates must avoid unplanned production downtime, which can be extremely costly. TeSys island helps to reduce unplanned downtime with predictive maintenance so that repairs can be completed during a scheduled maintenance window.

TeSys island is fully integrated into the PLC programming environment using digital objects. TeSys island is fully integrated into the EcoStruxure portfolio that combines products and software packages into automation solutions for OEMs and machine builders. The system also supports integration into third-party PLCs.

## TeSys island Concept

TeSys island describes an open, modular distributed input/output system comprising different modules mounted on a DIN rail backplane.



- A Bus coupler
- B Analog input/output module
- C Digital input/output module
- D Voltage interface module
- E Standard starter
- F SIL (Safety Integrity Level) starter
- G SIL interface module
- H Power interface module

The TeSys island device acts as a node in a fieldbus network. The bus coupler is the core module of the device. The bus coupler provides internal communication with the TeSys island modules via ribbon cables and external communication via Modbus TCP protocol.

For more information, refer to the [TeSys island System Guide](#).

## System Requirements

The following components are required for communication via EtherNet/IP or Modbus TCP.

Component	Type and Version
EcoStruxure Control Expert Classic software	Classic V15.0 SP1
PSx DTM Library version	3.14.54
Schneider_Electric_TeSys_island_DTM_Library version	2.2.2 or later
Controller	BMEP58•••• logic controller

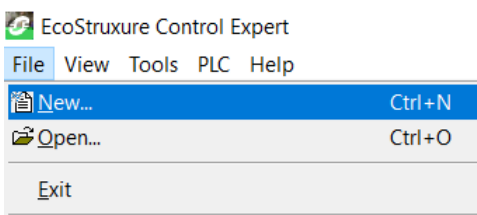
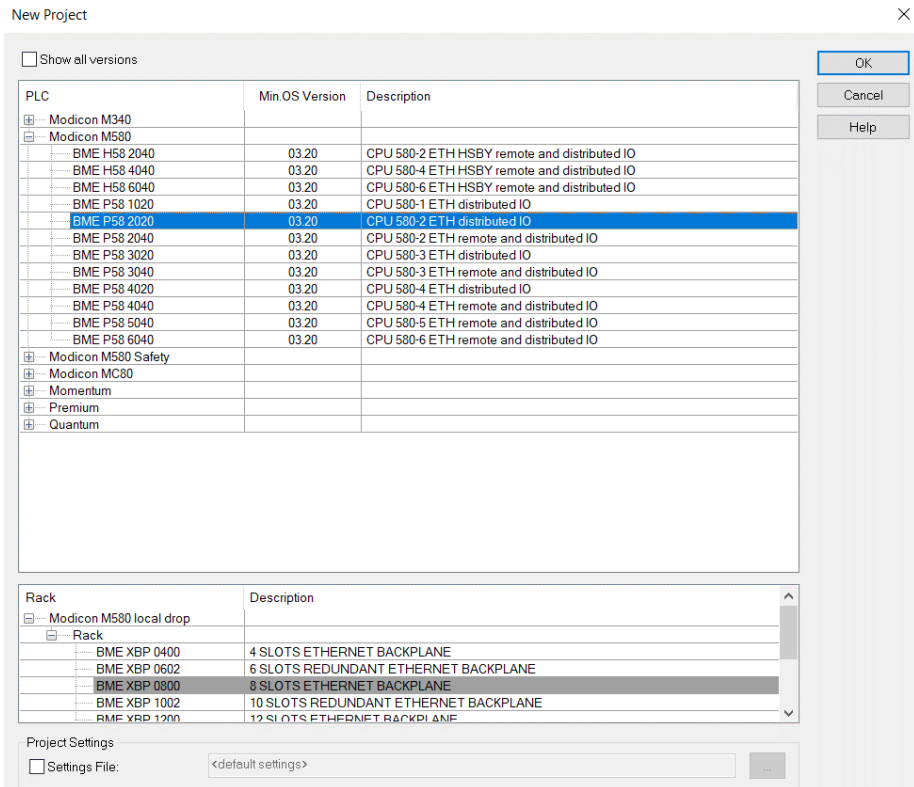



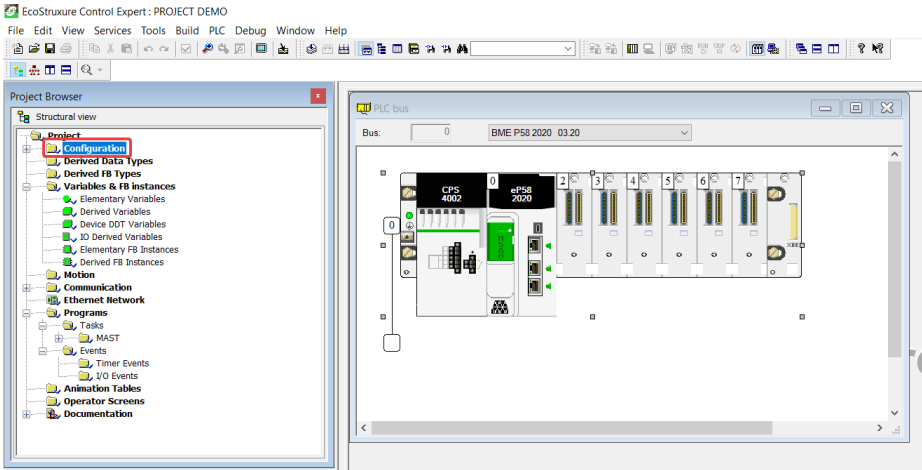
# Integrating TeSys island into EcoStruxure Control Expert Classic Project

## Creating a Project

**NOTE:** Before creating a new project, you must know the type of PLC model and PLC backplane required to integrate into the project.

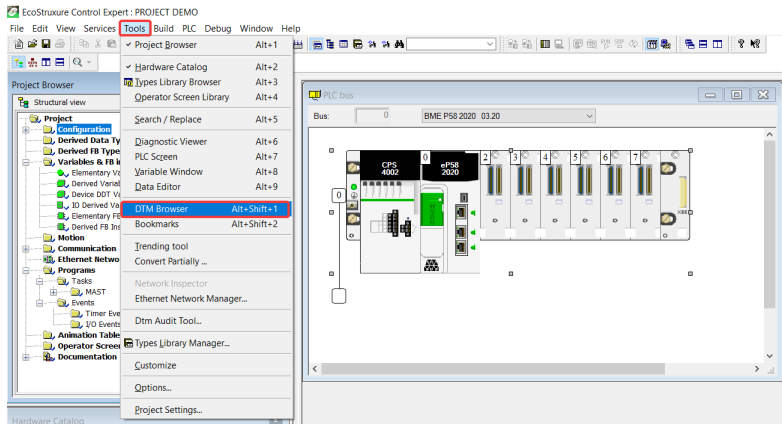
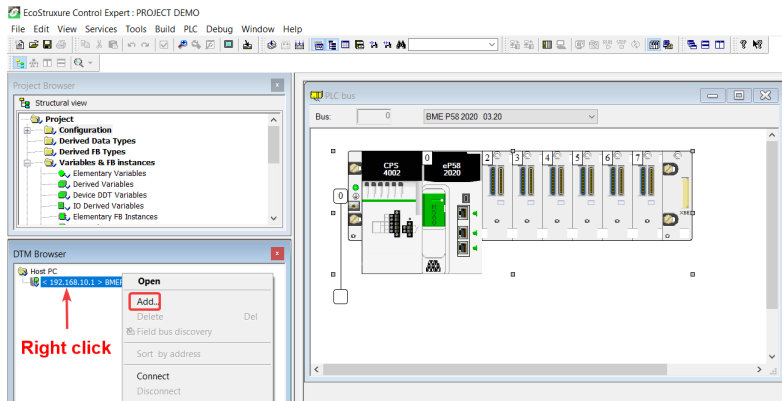
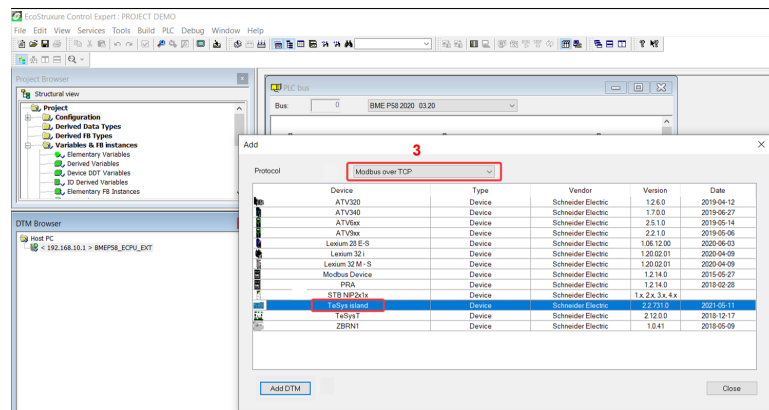
Perform the below steps to create a project:

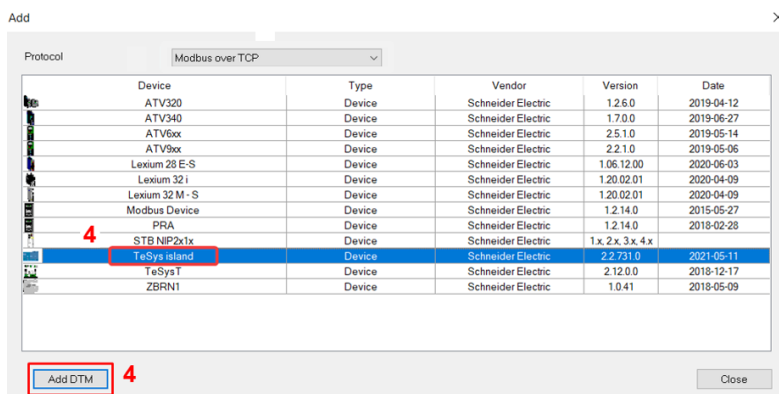
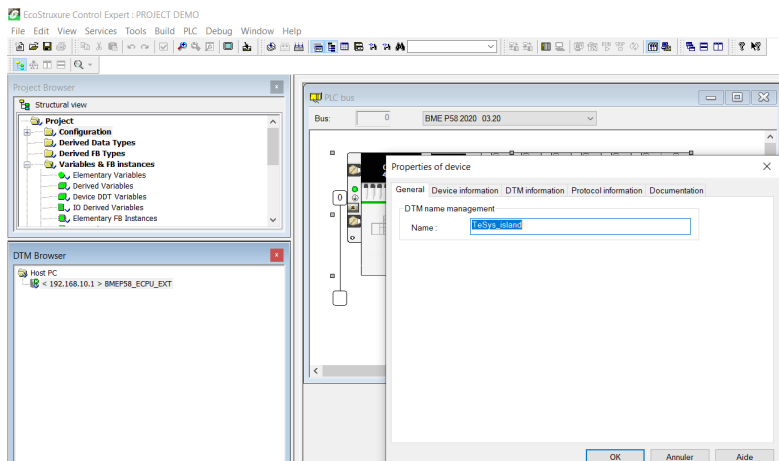
Step	Action
1	Open EcoStruxure Control Expert Classic software.
2	<p>Click <b>File &gt; New</b>.</p> <p><b>Result:</b> List of PLCs is displayed on the screen.</p> 
3	<p>Select a PLC Modicon M580 according to the hardware that will be used for the project.</p> <ol style="list-style-type: none"> <li>In the <b>PLC</b> window, click <b>Modicon M580</b>.</li> <li>In the <b>Rack</b> window, expand <b>Modicon M580 local drop</b> and select a rack.</li> <li>Click <b>OK</b>.</li> </ol> <p><b>Result:</b></p> <ol style="list-style-type: none"> <li>A processing command window appears. Wait for some time to complete the processing of the configuration files.</li> <li>When the processing of files is completed, the <b>Security enforcement</b> window is displayed on the screen.</li> </ol> 

Step	Action
4	<p>To manage a password, perform one of the following steps as required:</p> <ul style="list-style-type: none"> <li>• Create a new password for the project and click <b>OK</b>.</li> <li>• Click <b>Cancel</b> if password is not required.</li> </ul> <p><b>Result:</b> The structure of the project is created and displayed in the <b>Project Browser</b> window.</p> 
5	<p>Double-click the <b>Configuration</b> folder in the Structural view.</p> <p><b>Result:</b> The physical view of the device configuration is displayed on the screen.</p> 

## Adding TeSys island to the Project

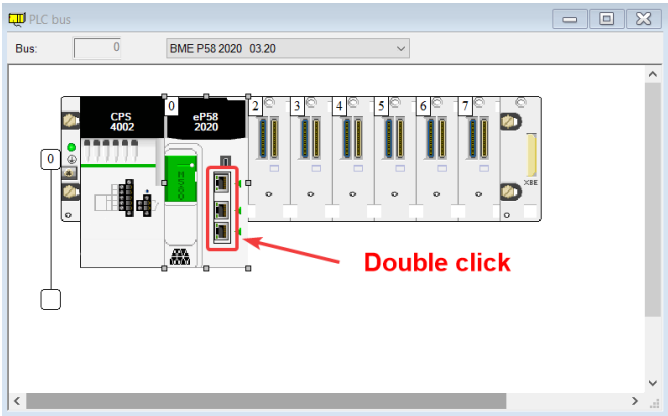
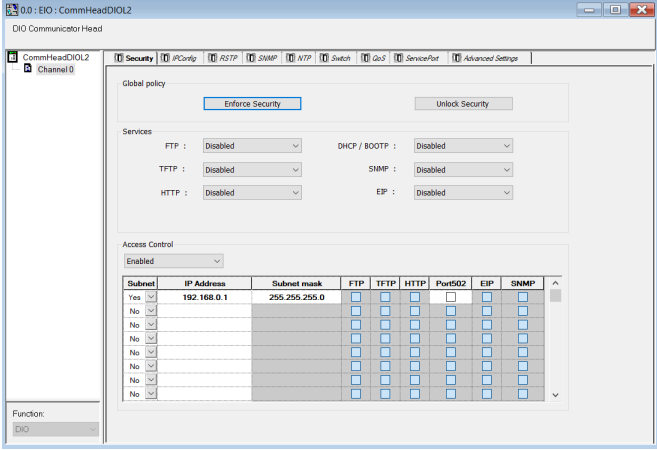
Perform the below steps to add TeSys island to the project:

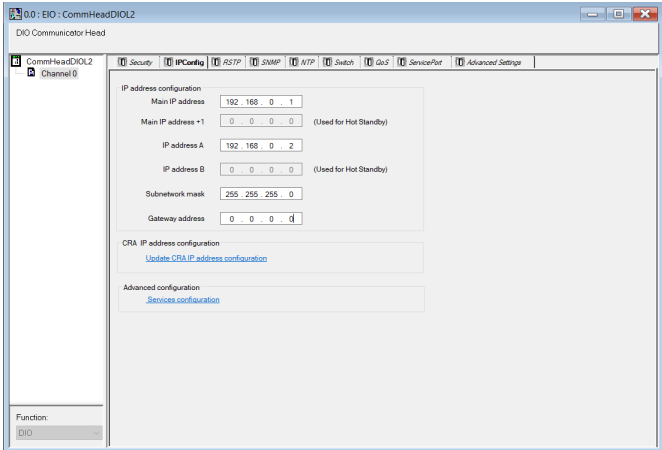

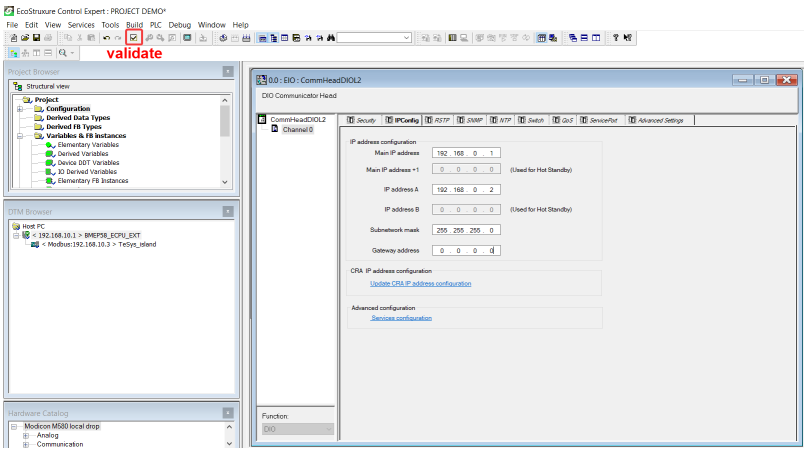
Step	Action
1	<p>Click <b>Tools &gt; DTM Browser</b>.</p>  The screenshot shows the EcoStruxure Control Expert software interface. The 'Tools' menu is open, and 'DTM Browser' is highlighted under the 'Tools' submenu. The background shows a PLC rack configuration window.
2	<p>Right-click on the CPU name in the <b>DTM Browser</b> window and select <b>ADD</b>.</p> <p><b>Result:</b> The <b>ADD</b> window is displayed on the screen.</p>  The screenshot shows the 'DTM Browser' window. A right-click context menu is open over the 'Host PC' entry, and the 'Add...' option is highlighted. A red arrow points to the 'Add...' option with the text 'Right click'.
3	<p>In the Protocol drop-down menu, select <b>Modbus over TCP</b>.</p>  The screenshot shows the 'Add' dialog box. The 'Protocol' dropdown menu is open, and 'Modbus over TCP' is selected. A red box highlights the dropdown menu with the number '3' above it. The dialog box also displays a table of available devices.

Step	Action
4	<p>Select <b>TeSys island</b> device and click <b>Add DTM</b>.</p> <p><b>Result:</b> The device properties window is displayed on the screen.</p> <div></div>
5	<p>In the <b>Properties of device</b> window, change the name of the device if required and click <b>OK</b>.</p> <div></div>

## Configuring the IP Address of the CPU

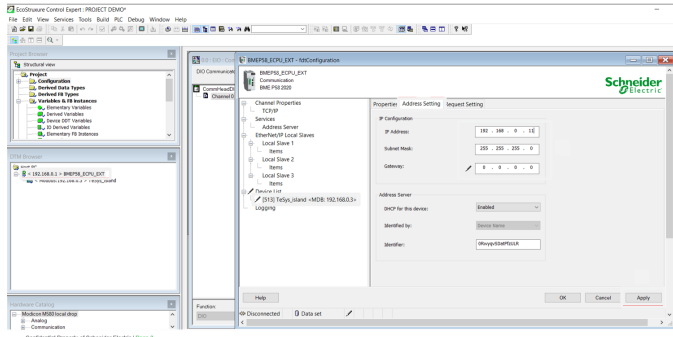
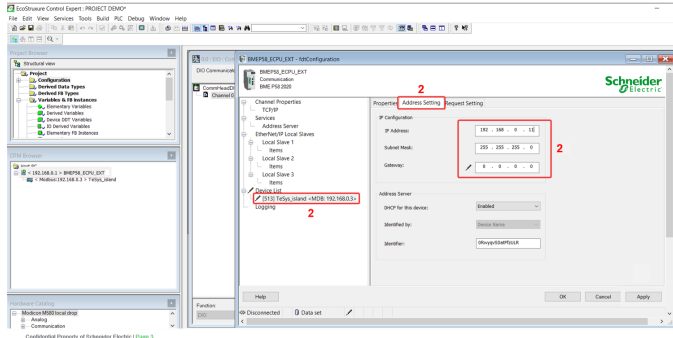

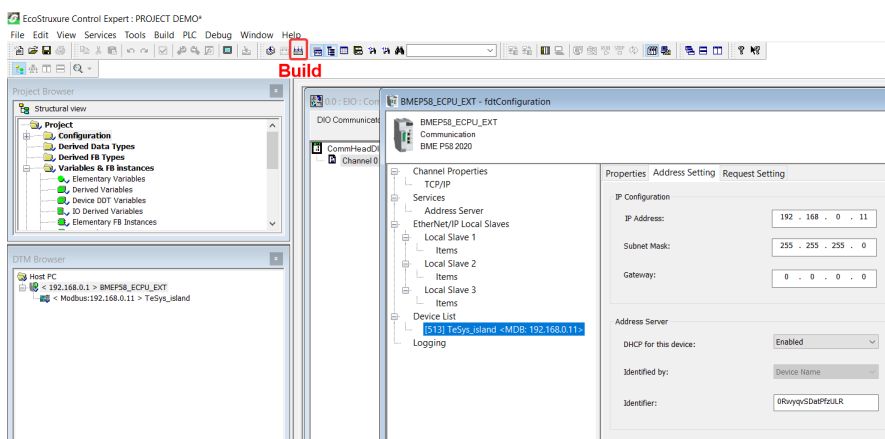
Perform the below steps to configure the IP address of the CPU:

Step	Action
1	<p>Double-click the <b>Configuration</b> folder in the <b>Project Browser</b> window.</p> <p><b>Result:</b> The physical view of the device configuration is displayed on the screen.</p> 
2	<p>Double-click the communication connectors of the PLC on the <b>PLC bus</b> window.</p> <p><b>Result:</b> The communication settings window of the PLC is displayed on the screen.</p>
3	<p>Click <b>Security</b> menu and perform one of the following steps as required:</p> <ul style="list-style-type: none"> <li>Click <b>Enforce Security</b> to enable or disable the services.</li> <li>Click <b>Unlock Security</b> to enable all services.</li> </ul> 

Step	Action
4	<p>Click <b>IP Configuration</b> menu and set the IP address of the CPU according to the network.</p> <p><b>Note:</b> The <b>IP address A</b> has to be different than the <b>Main IP address</b>.</p> 
5	<p>Click the <b>Validate</b> icon (  ) on the toolbar.</p> 

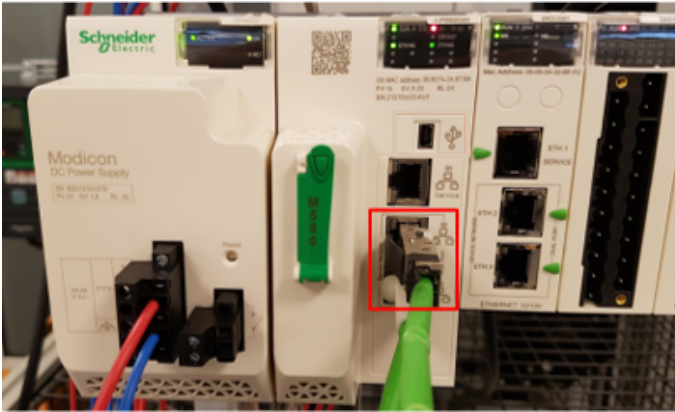



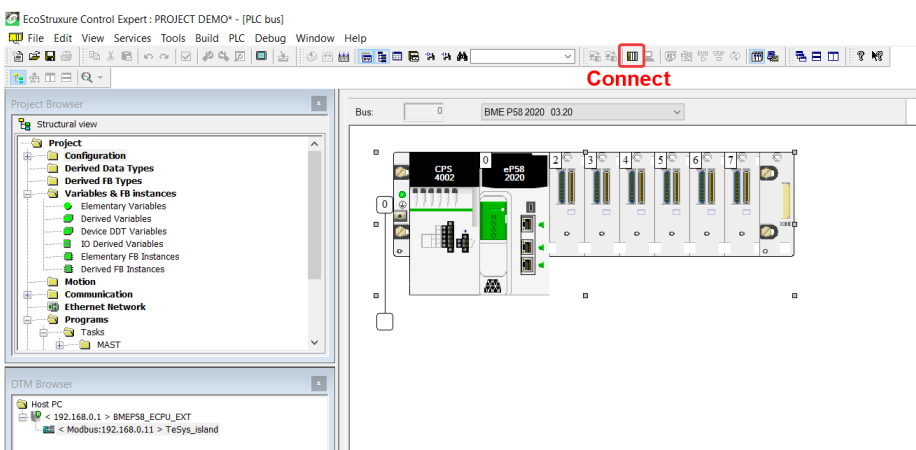
# Configuring the IP Address of the TeSys island

Perform the below steps to configure the IP address of the TeSys island:


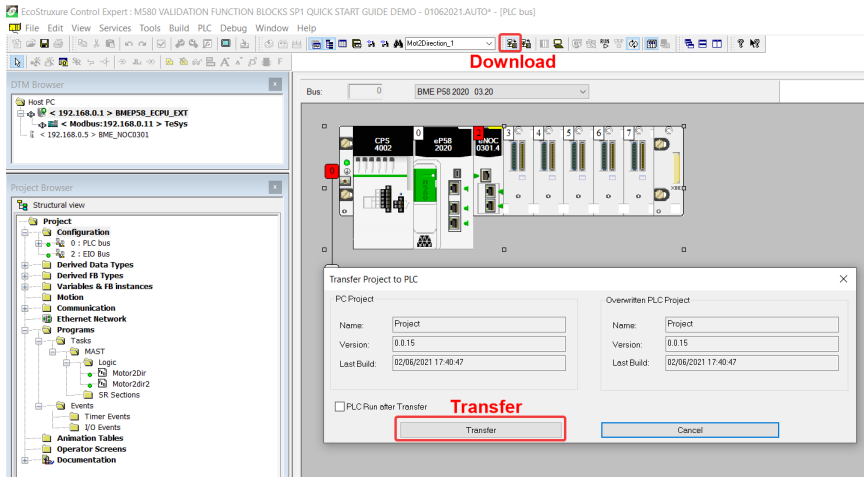
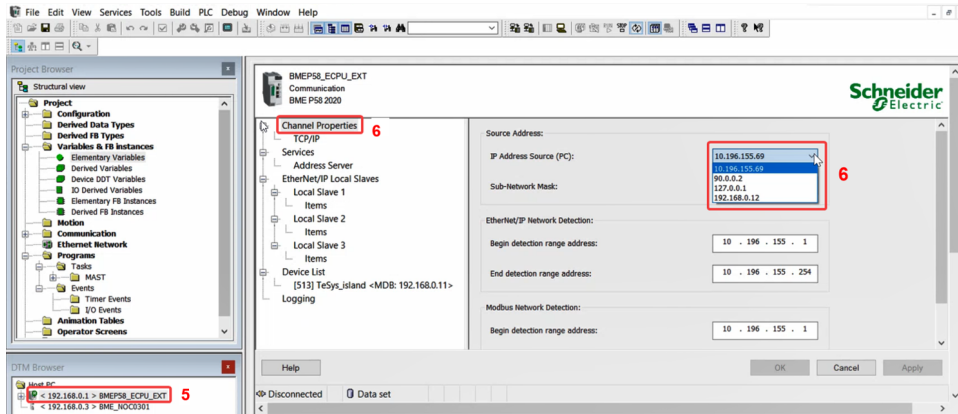
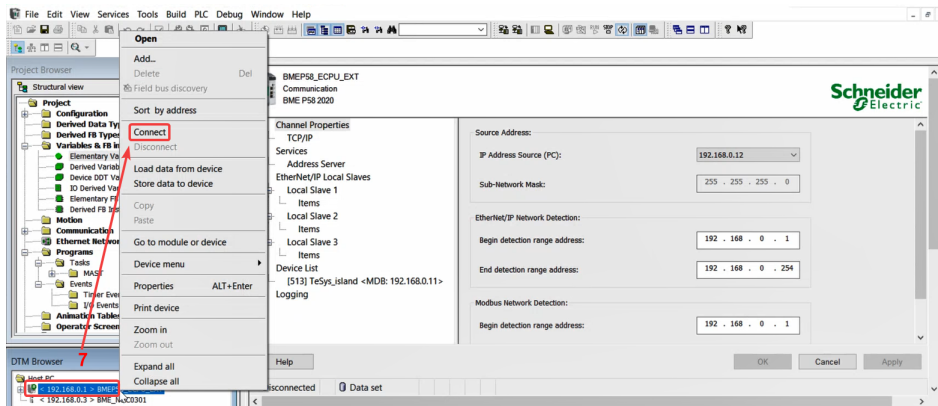
Step	Action
1	<p>Double-click the CPU in the <b>DTM Browser</b> window.</p> <p><b>Result:</b> The device configuration window is displayed on the screen.</p> 
2	<p>Select <b>TeSys island device &gt; Address Setting</b> menu, and configure the IP address of the TeSys island.</p> 
3	<p>Click <b>Apply</b>.</p>
4	<p>Click the Build icon (  ) on the toolbar.</p> 

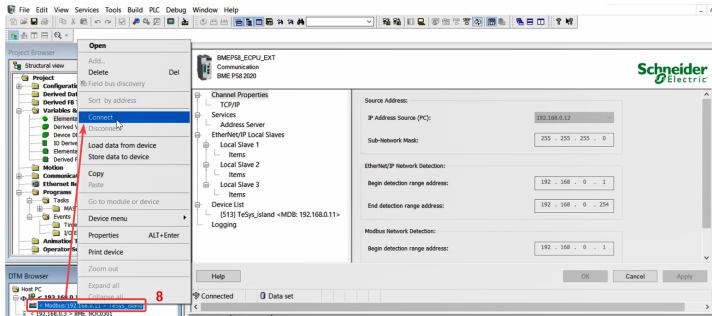
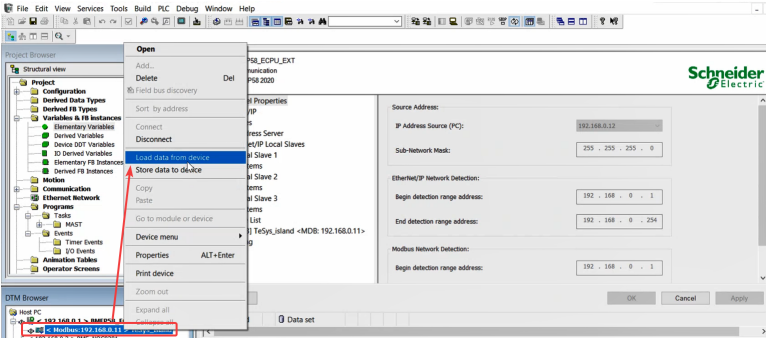
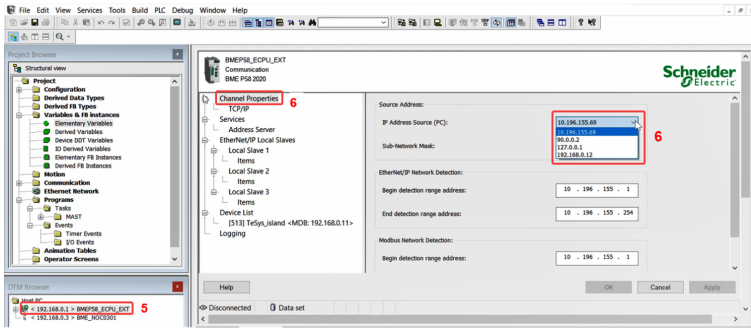
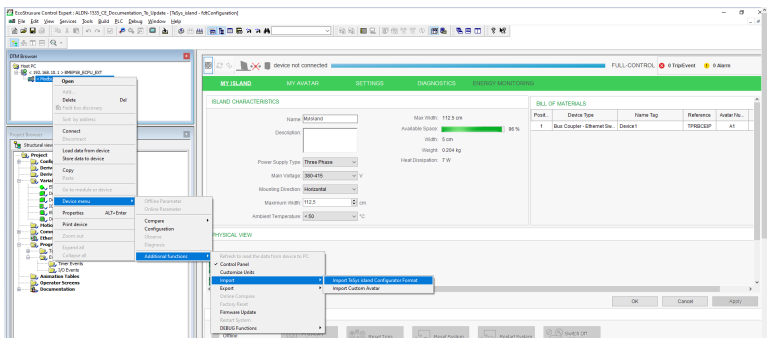
## Uploading TeSys island Project to PLC

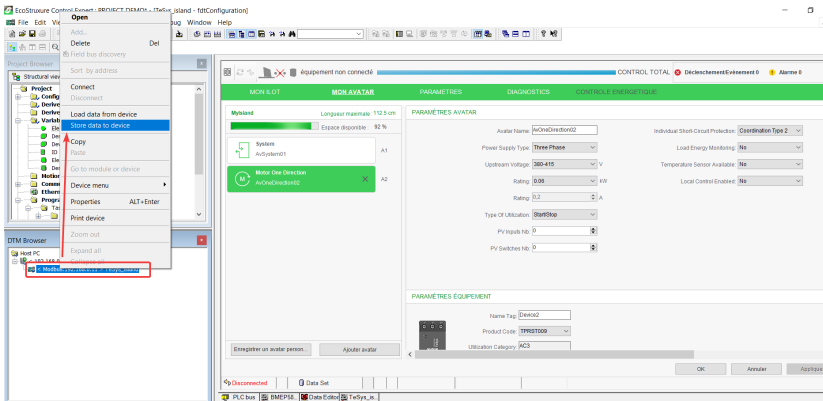
Perform the below steps to upload the TeSys island project to PLC:

Step	Action
1	<p>Establish the connection between the PC and PLC by performing one of the following steps:</p> <ul style="list-style-type: none"> <li>Connect to the PLC by using the IP address.</li> </ul>  <ul style="list-style-type: none"> <li>Connect the USB ground cable (BMXXCAUSBH018) between the PC and the front panel of the PLC M580.</li> </ul>  
2	<p>Click the Connect icon (  ) on the toolbar.</p> 



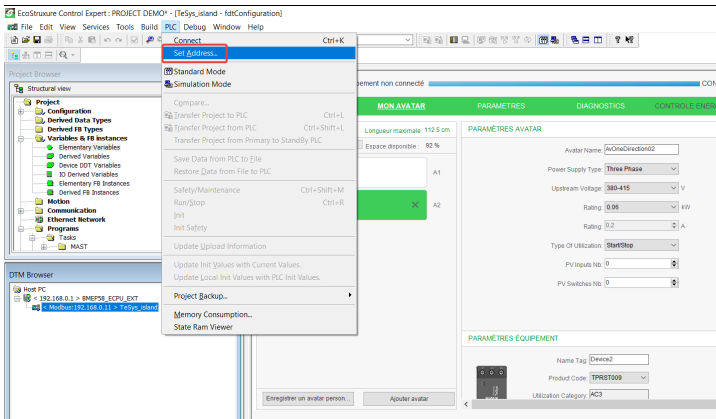
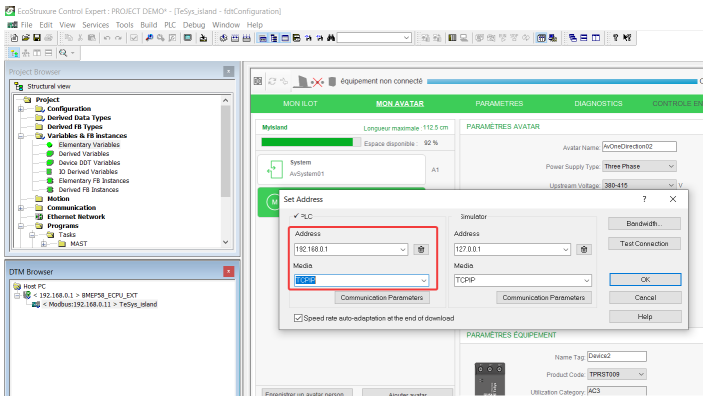

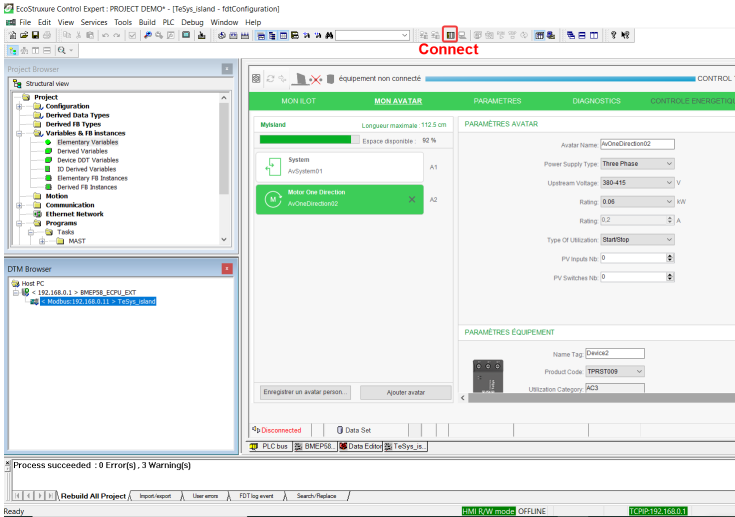
Step	Action
3	<p>Click the Download icon () on the toolbar.</p> <p><b>Result:</b> The <b>Transfer Project to PLC</b> window is displayed on the screen.</p> 
4	<p>Click <b>Transfer</b>.</p> <p><b>Result:</b> The TeSys island project is uploaded to the PLC.</p>
5	<p>Double-click the CPU in the <b>DTM Browser</b> window.</p> <p><b>Result:</b> The communication window is displayed on the screen.</p>
6	<p>Select <b>Channel Properties &gt; IP Address Source (PC)</b>, and click <b>OK</b>.</p> 
7	<p>Right-click on the CPU name in the <b>DTM Browser</b> window and select <b>Connect</b>.</p> 

Step	Action
8	<p>Right-click on the TeSys island device in the <b>DTM Browser</b> window and select <b>Connect</b>.</p> 
9	<p>Based on the specific requirement, you can choose one of the following steps to configure the TeSys island:</p> <ul style="list-style-type: none"> <li>If the TeSys island has already been configured and the user does not want to upload a new configuration, right-click on the TeSys island device in the <b>DTM Browser</b> window and select <b>Load data from device</b>.</li> </ul>  <ul style="list-style-type: none"> <li>If the TeSys island has not been configured and the user wants to upload a new configuration, perform one of the following steps as required: <ul style="list-style-type: none"> <li>Double-click on the TeSys island device in the <b>DTM Browser</b> window and configure the device.</li> </ul>  <ul style="list-style-type: none"> <li>Right-click on the TeSys island device in the <b>DTM Browser</b> window, and click <b>Device menu &gt; Additional functions &gt; Import &gt; Import TeSys island Configurator Format</b> to import the configuration files.</li> </ul> <p><b>Result:</b> The new configuration is imported into the software.</p>  </li> </ul>

Step	Action
10	<p>Double-click the TeSys island device in the <b>DTM Browser</b> window, and select <b>Store data to device</b>.</p> 

# Uploading TeSys island Project to PLC via Ethernet Cable

Perform the below steps to upload the TeSys island project to PLC via Ethernet cable:

Step	Action
1	<p>Click <b>PLC &gt; Set Address</b>.</p> <p><b>Result:</b> The <b>Set Address</b> window is displayed on the screen.</p> 
2	<p>Select the IP address of the PLC. Select the <b>Media</b> as <b>TCP/IP</b> and click <b>OK</b>.</p> 
3	<p>Click the <b>Connect</b> icon (  ) on the toolbar.</p> <p><b>Result:</b> TeSys island is integrated into the project and connected to the PLC Modicon M580 with EcoStruxure Control Expert Classic software.</p> 

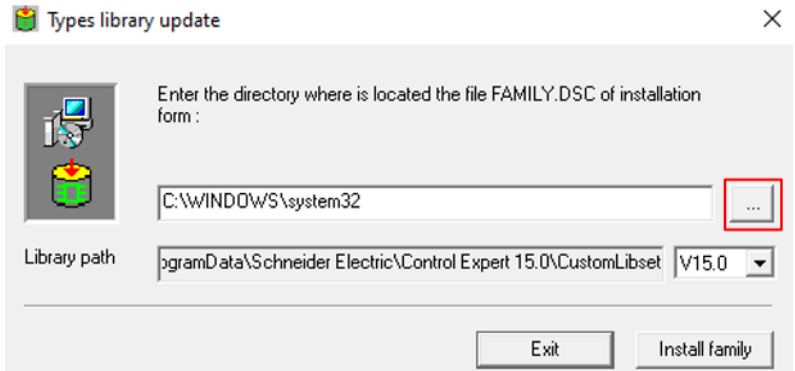
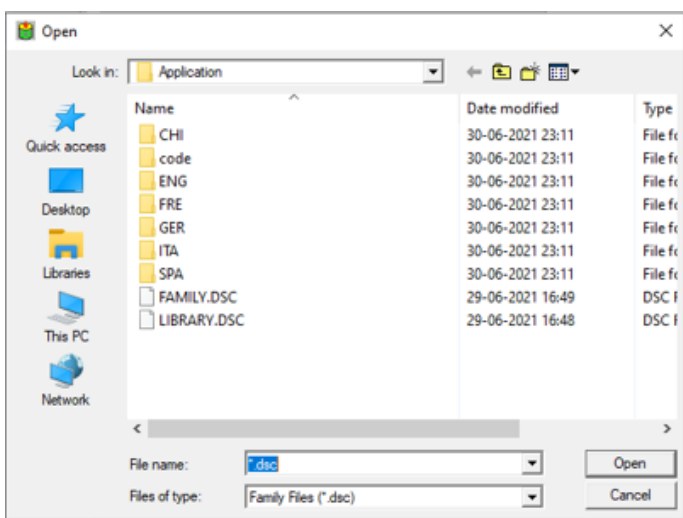
# Using the TeSys island Library for Developing Applications

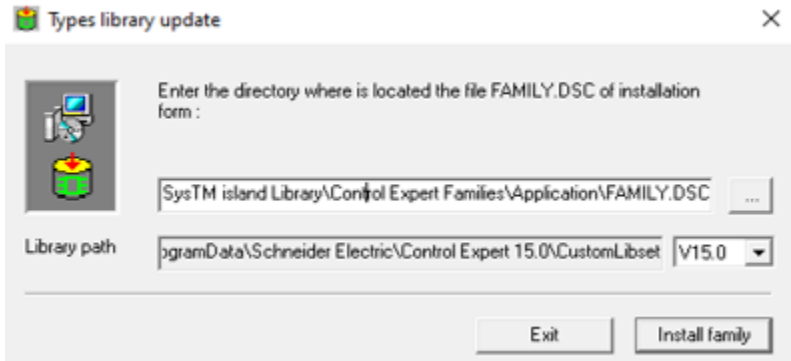
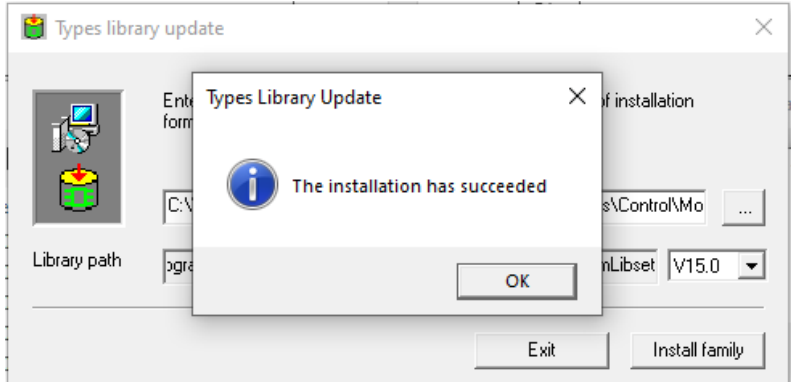
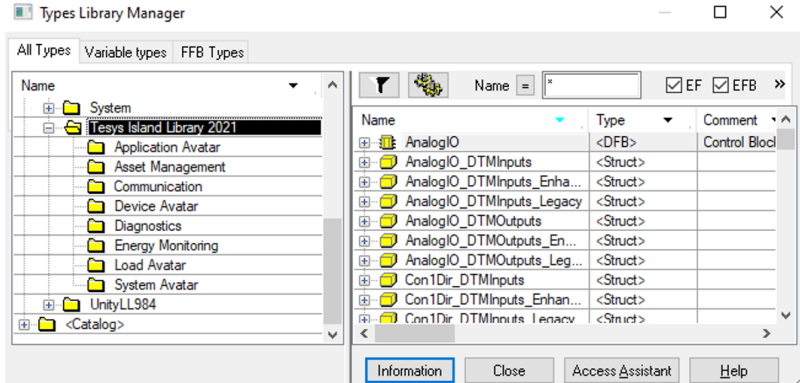
## Overview

The TeSys island library is added to the **Types Library Manager** in the EcoStruxure Control Expert Classic software. The library manager provides function blocks to support in developing applications and to control TeSys avatars.

## Installing Function Blocks of TeSys island Library

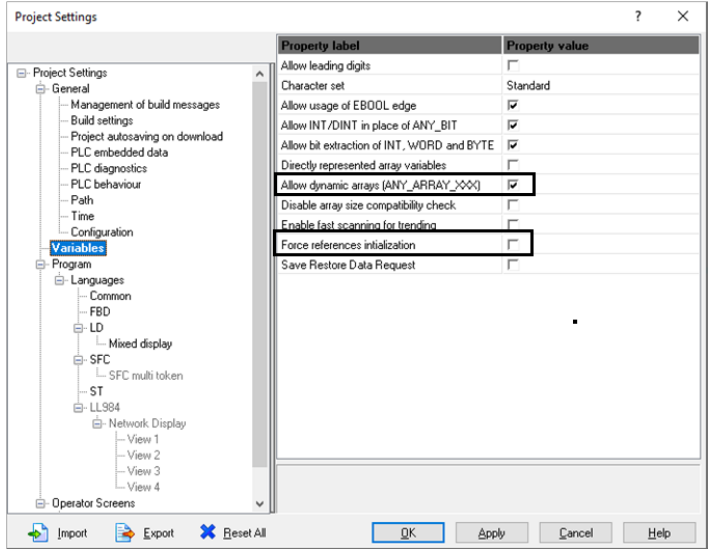
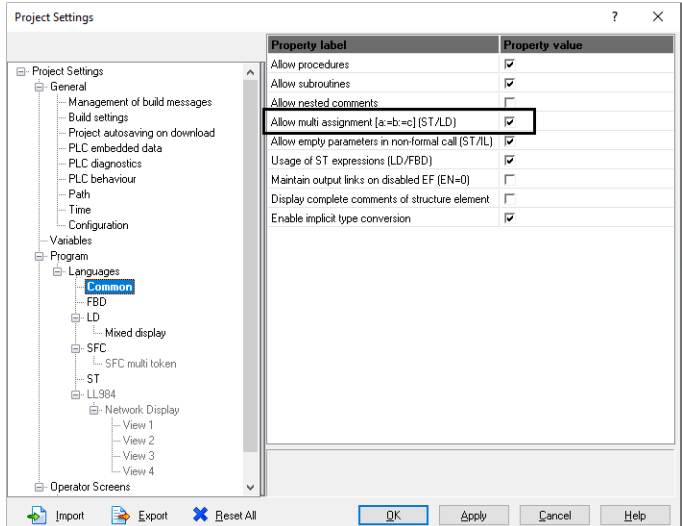
Perform the below steps to install the function blocks of TeSys island library:

Step	Action
1	Download the latest EcoStruxure Control Expert 2021 – TeSys island Library.zip file from Schneider Electric Industry End Users and SI Campus.
2	Extract the zip file in the local hard disk.
3	Click <b>Start &gt; EcoStruxure Control Expert Classic &gt; Types library update</b> . <b>Result: Types library update</b> window is displayed on the screen.
4	Click Browse button. 
5	Browse the location of the extracted zip folder, select <b>FAMILY.DSC</b> file, and click <b>Open</b> . 

Step	Action
6	<p>Click <b>Install family</b>.</p> <p><b>Result:</b> The installation of the library file starts.</p> 
7	<p>On successful installation of a family file, a message appears on the screen. Click <b>OK</b>.</p> 
8	<p>Open <b>EcoStruxure Control Expert Classic</b> software. Click <b>Tools &gt; Types Library Manager</b>.</p> <p><b>Result:</b> <b>TeSys island Library 2021</b> is displayed under <b>Libset V15.0</b> or later.</p> 

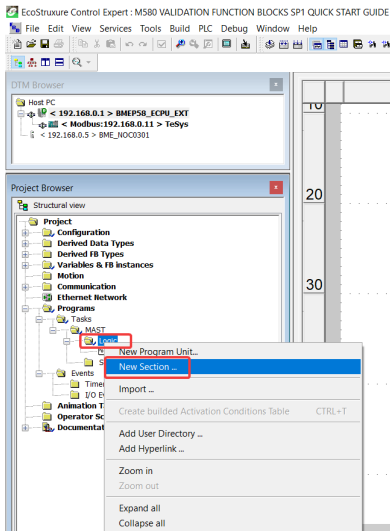
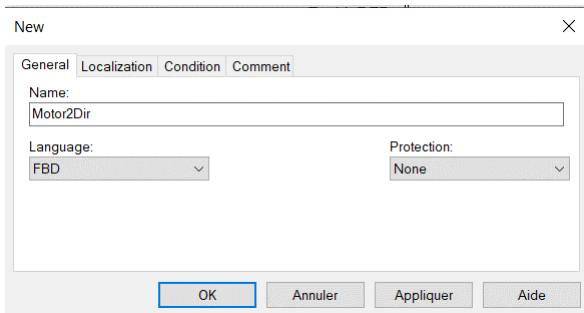
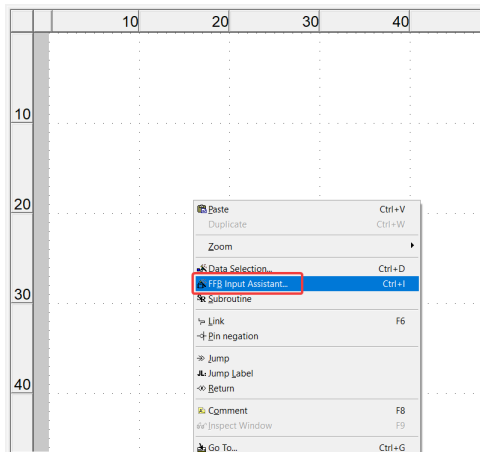
## Configuring Project Settings

Perform the below steps to configure the project settings:

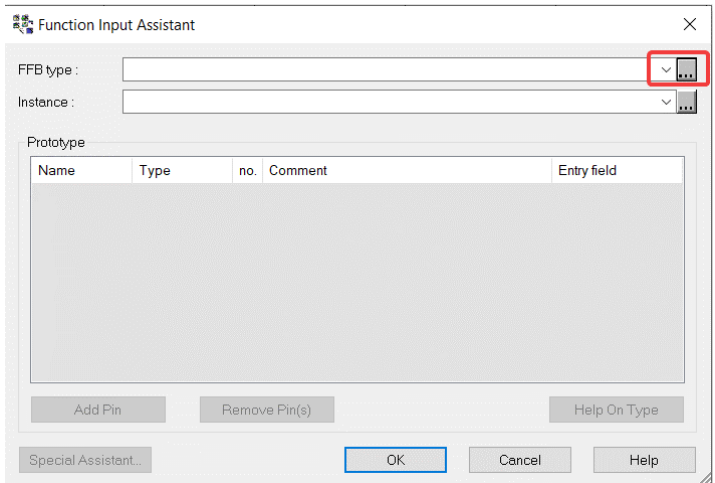
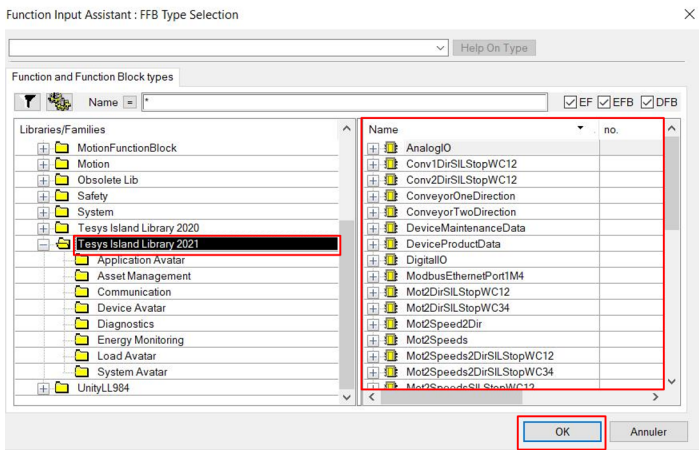
Step	Action
1	Open the generated .stu or .xref file in EcoStruxure Control Expert Classic software.
2	Click <b>Tools &gt; Project Settings</b> . <b>Result: Project Settings</b> window is displayed on the screen.
3	Click <b>Variables</b> and select the <b>Allow dynamic arrays (ANY_ARRAY_XXX)</b> check box to avoid the detected error <b>E1208 usage of dynamic arrays is disabled</b> reported when compiling the project. 
4	Clear the <b>Force references initialization</b> check box.
5	Click <b>Languages &gt; Common</b> and select the <b>Allow multi assignment [a=b=c] {ST/LD}</b> check box to avoid the detected error <b>E1203 usage of multi assignment statements is disabled</b> reported when compiling the project. 

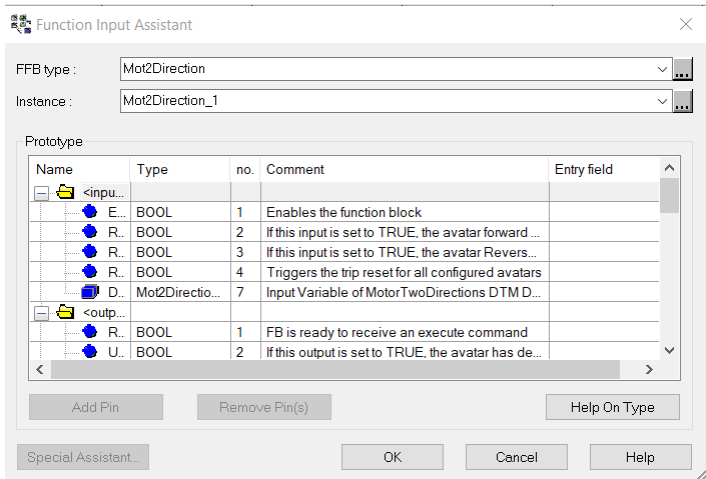
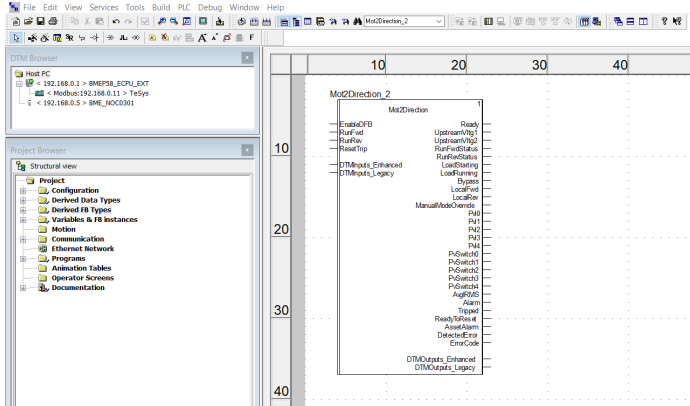
## Using Function Blocks for Developing Application

Perform the below steps to use the function block for developing the application in EcoStruxure Control Expert Classic software:

Step	Action
1	<p>In <b>Project Browser</b> window, click <b>Programs &gt; Tasks &gt; MAST &gt; Logic</b>.</p> 
2	<p>Right-click on the <b>Logic</b> folder and select <b>New Section</b>.</p> <p><b>Result:</b> The <b>New Section</b> window is displayed on the screen.</p>
3	<p>Enter a new name to the function block. Select language <b>FBD</b> and click <b>OK</b>.</p> <p><b>Result:</b> The configuration zone window is displayed on the screen.</p> 
4	<p>Right-click on the configuration zone and select <b>FFB Input Assistant</b>.</p> <p><b>Result:</b> <b>Function Input Assistant</b> window is displayed on the screen.</p> 



Step	Action
5	<p>Click the Browse button located next to <b>Function Input Assistant</b> screen.</p> <p><b>Result: FFB Type Selection</b> window is displayed on the screen.</p> 
6	<p>On <b>FFB Type Selection</b> screen, select <b>&lt;Libset V15.0&gt; &gt; TeSys island Library 2021</b> and then select the required function block and click <b>OK</b>.</p> 

Step	Action
7	<p>After selecting the function block, click <b>OK</b> on the <b>Function Input Assistant</b> screen.</p> <p><b>Result:</b> An icon appears near the arrow of the mouse.</p> 
8	<p>Left-click on the configuration zone.</p> <p><b>Result:</b> The structural view of the function block is displayed on the screen.</p> 

For more information on the available functional blocks and its configuration, refer to the *EcoStruxure Control Expert – TeSys island Library Control – User Guide*.



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